Remarks

Reconsideration of this Patent Application is respectfully requested, particularly as herein amended.

Before turning to the merits of the Office Action of September 15, 2009, the undersigned would like to acknowledge an interview which was conducted with the Examiner in this matter on March 10, 2010. The undersigned thanks the Examiner for the courtesy of this interview, the substance of which is discussed in the Remarks which follow.

Turning to the merits of the issued Office Action, and following acknowledgment of the request for continued examination which was submitted in this matter on August 4, 2009, the Office Action of September 15, 2009, maintains the refusal to consider five documents which had earlier been submitted for consideration pursuant to the requirements of 37 C.F.R. §1.56(a).

As indicated in earlier papers filed in connection with this Patent Application, the five documents at issue had been submitted for consideration with an Information Disclosure Statement which was filed on August 24, 2005. Consideration of these documents was refused in the Office Action of February 26, 2008, even though as noted in the Reply filed on August 22, 2008, these documents were cited in the "International Search Report" issued for International Application No. PCT/FR2003/002884, from which the current U.S. Patent Application is derived pursuant to 35 U.S.C. §371.

As was further noted in the Reply filed on August 22, 2008, receipt of the International Search Report was acknowledged in the "Notice of Acceptance of Application Under 35 U.S.C 371 and 37 CFR 1.495" issued for this Patent Application. Also, and for the convenience of the Examiner, copies of the five documents at issue, including EP 0 142 071 (Lignomat GmbH), FR 2 790 698 (Laurencot), FR 2 757 097 (BCI), FR 2 720 969 (Montornes) and FR 2 604 245 (Gautreau) were further enclosed with the Reply filed on August 22, 2008. Nevertheless, consideration of these five documents has, to date, been refused.

In discussing this matter with the Examiner on March 10, 2010, it was determined that consideration of the documents at issue was not being refused, but that the Examiner wanted to have a separate submission of information pursuant to 37 C.F.R. §1.56(a) directed only to the five documents at issue, and which did not also list the other documents which had been submitted with the Information Disclosure Statement filed on August 24, 2005, and which had already been considered by the Examiner.

To this end, the U.S. Patent Office is again being advised of the following information, which may be considered "material to patentability" in examining this Patent Application in accordance with the provisions of 37 C.F.R. §1.56, which was cited in the International Search Report issued in International Application No. PCT/FR2003/002884.

Foreign Patent Documents

EP 0 142 071 (Lignomat GmbH) - Published: May 22, 1985

FR 2,790,698 (Laurencot) - Published: September 15, 2000

FR 2,757,097 (BCI) - Published: June 19, 1998

FR 2,720,969 (Montornes) - Published: December 15, 1995

FR 2,604,245 (Gautreau) - Published: March 25, 1988

Copies of the above-listed documents were previously made available to the U.S. Patent Office, and the identified documents are listed on a PTO-1449 form (1) which is enclosed with this Reply to facilitate the Examiner's acknowledgement of the five documents at issue.

Due consideration of the foregoing documents is respectfully requested under 37 C.F.R. §1.56(a)(2). It is further respectfully requested that the Examiner acknowledge consideration of the above-listed documents by initialing the PTO-1449 form which is enclosed with this Reply and which separately lists the foregoing documents, as requested, and that the Examiner provide the applicant with an initialed copy of the enclosed PTO-1449 form to confirm consideration of the listed documents.

It is respectfully submitted that no fee is required for consideration of the foregoing documents. However, in the event that a fee is deemed to be necessary for consideration of the above-discussed documents, any additional fees which may be required, or any overpayments, can be charged to Deposit Account

No. 03-2405 and corresponding action is earnestly solicited.

The Office Action next rejects claims 8 to 22 under 35 U.S.C. §103(a) as being unpatentable over the patents to Rosenau (US 4,356,641), Weis (US 3,744,144) and Little (US 5,325,604), in the alternative. Such rejection of applicant's claims is respectfully traversed.

As has previously been stated, claims 8 to 22 are directed to the high-temperature heat treatment of a load of ligneous material for purposes of making it possible to preserve the mechanical, acoustic and insulating characteristics of the wood being treated.

It has been noted that in the "Response to Arguments" provided on pages 7 and 8 of the Office Action, and during the discussion with the Examiner on March 10, 2010, the position has been taken that such features are not considered to have been recited in independent claim 8. In response, it was noted that these features were recited in the first three lines of independent claim 8. The Examiner, however, expressed the preference for reciting these features later in the claim, and claim 8 has been amended to respond to this preference. Also to be noted is dependent claim 22, which is specifically directed to an increase in the temperature of the heat-treatment cycle to 230 °C.

Also discussed was the Examiner's position relative to the terms "ligneous" and "woody". The Examiner indicated that these terms appeared to be the same, and that in such case,

support for the term "ligneous material" would be found in the specification as originally filed. As noted in the Reply filed on August 22, 2008, the term "ligneous material" is considered to correspond to the term "woody material", which removes this issue from further consideration.

The "Response to Arguments" provided on pages 7 and 8 of the Office Action further takes the position that Rosenau, Weis and Little each "pertain to the high temperature heat treatment of woody or ligneous material". In discussion which follows, it will be demonstrated that this would not have been the understanding of a person of ordinary skill in the art at the time applicant's invention was made.

A high-temperature heat treatment of ligneous material is significantly different from a process for drying a wood product, which only serves to withdraw moisture from the wood. For example, in addition to the evacuation of water from the wood being treated, a high-temperature heat treatment also cause polymerization of the macromolecular chains of the constituents of the wood, which stabilizes the properties of the wood being treated, among other beneficial results.

Rosenau, Weis and Little disclose various processes for kiln-drying wood products, and provide no disclosure relating to a high-temperature heat treatment of a ligneous material. The drying procedures disclosed by Rosenau, Weis and Little are performed at temperatures on the order of 110 to 180 °F (i.e., 43 to 82 °C), which do not even approach the temperatures used

to perform a high-temperature heat treatment. Such differences in operating temperature result in significant differences in the processes used to achieve a safe and effective result.

To illustrate this, an article entitled "Ignition and Charring Temperatures of Wood" published by the Forest Products Laboratory, Forest Service, U.S. Department of Agriculture is submitted with this Reply. As is best illustrated with reference to Table 1 of the Article, the autoignition temperature for the various wood species indicated varies significantly, and can for some species occur at temperatures as low as 180 °C. As further illustrated with reference to Table 2, significant weight loss and shrinkage can occur at temperatures as low as 150 °C, even for relatively short exposures of the wood to such conditions. It is important to note here that all of the temperatures addressed in this Article are significantly higher than the temperatures of 110 to 180 °F (i.e., 43 to 82 °C) which are disclosed for use in connection with the drying procedures described by Rosenau, Weis and Little.

The significant importance of the difference between temperatures used in a "high-temperature heat-treatment cycle", as is recited in applicant's claims, and the temperatures disclosed by Rosenau, Weis and Little for the kiln-drying of wood products, is further demonstrated with reference to two statements which are being presented by the applicant and which are additionally submitted with this Reply. These statements, which are in the French language, bear the headings "ATTESTATION"

and "TRAITEMENT THERMIQUE DU BOIS A HAUTE TEMPERATURE - NIVEAU DE LA TEMPERATURE DE TRAITEMENT". English translations of the two statements have also been provided.

As is noted in these statements, a "high-temperature heat-treatment cycle" such as is recited in applicant's claims would have a specific meaning in the art to which this subject matter pertains, that being a heat treatment that operates in excess of 190 °C, and that such temperatures are necessary for achieving satisfactory results. Moreover, and as is further noted in these statements, the heat treatment of wood at such temperatures must be carried out under appropriate conditions. Otherwise, there is a significant risk of an explosion or fire due to the potential for autoignition of the wood products being heat treated.

Turning now to the position taken in the Office Action of September 15, 2009, Rosenau, Weis and Little are in each case cited for the purpose of disclosing various structural features recited in independent claim 8, and the use of such structural features to regulate conditions within the enclosed treatment space.

However, as has previously been noted, the operating temperatures of 110 to 180 °F disclosed by Rosenau, Weis and Little are significantly lower than the temperatures which would have been considered to be appropriate for a "high-temperature" heat treatment of ligneous material by a person of ordinary skill in the art. As a consequence, it is submitted that the person of

ordinary skill in the art at the time applicant's invention was made would not have referred to the disclosures of Rosenau, Weis or Little for purposes of developing a "high-temperature" heat treatment of ligneous material, and that the disclosures of Rosenau, Weis or Little are not properly cited for purposes of rejecting applicant's claims under 35 U.S.C. §103(a).

Moreover, and even if the citation of Rosenau, Weis and Little is deemed to be proper, it is noted that the disclosures of Rosenau, Weis and Little are not referred to for purposes of disclosing the subject matter which is recited in the last four lines of independent claim 8. Instead, those elements recited in the last four lines of independent claim 8, and in dependent claims 9 to 22, "are deemed to be conventional, common practice... in the heating art", without the citation of any documentary evidence which would support such a conclusion.

It is, therefore, respectfully submitted that the various analyses presented in the Office Action which pertain to the last four lines of independent claim 8 are speculative and conclusory in the absence of any documentary evidence which would support the position being taken. However, a rejection of claims under 35 U.S.C. §103(a) "cannot be sustained by mere conclusory statements", KSR International Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007). Accordingly, it is submitted that without appropriate support for the position being taken in the Office Action of September 15, 2009, the formulated rejection of claims under 35 U.S.C. §103(a) "cannot be sustained".

Moreover, and as was noted previously, the Examiner is respectfully reminded of the procedures in Section 2144.03 of the Manual of Patent Examining Procedure. Part A of Section 2144.03 does indicate that official notice without documentary evidence can be used to support a position being taken in an Office Action. In such cases, and as is noted in Part C, "an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art". However, once this has been done, as in the present Patent Application, "the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained" (emphasis added). Consequently, in the event the Examiner elects to maintain the position that the subject matter recited in the last four lines of independent claim 8, and in dependent claims 9 to 22, is "conventional, common practice... in the heating art", the citation of documentary evidence for supporting such a position is respectfully requested pursuant to Section 2144.03 of the Manual of Patent Examining Procedure.

It is, therefore, submitted that the person of ordinary skill in the art at the time the present invention was made would not have referred to the disclosures of Rosenau, Weis or Little for purposes of developing a high-temperature heat treatment for ligneous material, and that the disclosures of Rosenau, Weis and Little would not have made applicant's claimed method obvious to the person of ordinary skill in the art at the time the present

invention was made under 35 U.S.C. §103(a).

In view of the foregoing, it is submitted that this Patent Application is in condition for allowance and corresponding action is earnestly solicited.

Respectfully submitted,

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I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office (Fax No. 571-273-8300) on: March 15, 2010.

Date: 3/15/10 Gary M. Cohen, Esq.